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ABSTRACT

While vowels are not consistent at the single-letter level, they tend to be more consistent in letter clusters or higher order units. Therefore, a program designed to teach reading without resorting to teaching single-vowel mappings has been developed. The reading program involves teaching single consonants, selected whole words, and higher order units that are at least 90% consistent in the language. Children are taught one consonant and two units in each of the program's 30 lessons. Computer analysis has revealed how quickly the program enables children to develop an enormous reading vocabulary. Two tests of the program with Title I students have revealed large gains in reading vocabulary. These results compare favorably with those from other currently available reading materials. (JL)

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TEACHING READING WITHOUT LONESOME VOWELS

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Many have argued that a major reason teaching beginning reading is so difficult is the lack of consistency in the English language. Shaw's well-known suggestion of spelling "fish" as "ghoti" is a humorous illustration of this. Although his example contains both inconsistent vowels and consonants, vowels are much more of a problem than consonants. For example the letter "a" has 18 different mappings in English.

Typical reading programs spend a great deal of time attempting to teach the beginner several sounds for each vowel. B*t y** pr*b*bly c*n r**d th*s s*nt*nc* pr*tty w*ll w*th**t *ny v*w*ls. It is argued here that beginning reading can be taught effectively without teaching single ("lonesome") vowels, thereby reducing the inconsistencies in the language considerably.

While vowels are not consistent at the single-letter level, they tend to be more consistent in letter clusters or what Gibson and her colleagues have called higher-order units. There is considerable evidence supporting a higher-order unit approach to decoding (e.g., Baron, 1977, 1979; Caldwell, Nix & Peckham, 1977; Gibson, Pick, Osser & Hammond, 1962; Gibson, Osser, & Pick, 1963; Gibson & inet, 1971; Pick, Thomas & Pick, 1966; Rozin & Gleitman, 1977; Rumelhart, 1977).

In a recent paper Caldwell, Nix & Peckham (1981) claimed that a computer analysis of the most frequently occurring 18,00 words in English resulted in identification of many higher-order units "potentially useful for reading instruction." A program designed to

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teach reading without resorting to teaching single vowel mappings was developed utilizing those potentially useful higher-order units, each containing at least one vowel.

The reading program involves teaching single consonants, selected whole words, and higher-order units (units) that are at least 90% consistent in the language. The program is divided into 30 lessons. In Lesson 1 two letters, m and r, three units, ail, an, and ay, and two whole words, is and the are presented. By combining the consonants and units in the lesson, the child can read the words, mail, man, may, rail, ran, ray, mailman, and rayman, in addition to is and the.

Many children master the material in Lesson 1 after 15-20 minutes of individual instruction, even if they cannot read anything before beginning the lesson. Thus after a few minutes of instruction they have a reading vocabulary of 10 words and are able to read a story about "Ray the Mailman." In the second lesson the consonant s is introduced with the units ake and ing. This increases the child's reading vocabulary to more than 40 words. By adding one consonant and two units in each succeeding lesson, the child's reading vocabulary soon becomes enormous.

We have written a computer program that searches the 18,000 word list by lesson and identifies the words on that list that can be generated from the given letters and units. Since the entire word can be generated, we call these "completely-decodable words," (CD Words). The computer program also identifies those words that can be generated except for one letter. We call these "completely-decodable-minus-one words," (CD-1 Words). For example by Lesson 2 the child has learned

the single letters m and s and the unit ing. Thus the word "missing" is completely decodable except for the first occurrence of the letter i. Table 1 shows the number of CD and CD-1 words for selected lessons.

TABLE 1

The Number of Completely-Decodable and Completely-Decodable-Minus-One Words for Selected Lessons

Lesson	CD Words	CD-1 Words	Total
5	134	161	295
10	538	950	1488
15	1430	3051	4481
20	2107	4493	6600
25	2739	5080	7819
30	3201	5665	8866

The power of the program is apparent. After learning fewer than 100 stimuli (consonants and units) a beginning reader is able to decode over 3000 words from the 18,000 word list, about 16% of all the words on the list. In addition she/he is able to read over 5600 more words except for one letter. Thus over 8800 of the words are either completely decodable or decodable except for one letter, nearly 50% of all the words on the list.

Initial testing with the program has been with ESEA Title I students in Appalachia. Ten students were tutored by a paraprofessional for approximately 15 minutes per day. These students were identified by school personnel as the "ten poorest readers in the school." Four were being retained in the first grade, two were second graders and four third graders. All had been tutored for at least one year in the Macmillan materials but were in effect non-readers. The comparison

group was the next 11 poorest readers as identified by school personnel.

The 10 students tutored with the "units" program showed large learning gains in the areas of blends/digraphs, units, nonsense words and real words, and outperformed the control group in all of these categories.

Sebsequently the program has also been used with first grade Title I students. Most of these first graders, tutored by a paraprofessional for 10-15 minutes each school day, complete over 20 lessons and some over 25 lessons during the school year. This gives them a reading vocabulary of well over 2000 words. Since most basal readers introduce fewer than 400 words during the first year, it is an obvious understatement to say that these figures compare favorably with other currently available reading materials.

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